

REMARKS

The Office Action dated December 22, 2003 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Upon entry of this Response, claims 1-18 will be pending in the present application. Claims 1, 5, 8, 12, and 16 are independent claims. Claims 1-18 have been amended exclusively for the purpose of clarity and to remove subject matter that has previously been included between parentheses. No new matter has been added. Claims 1-18 are respectfully submitted for consideration.

Rejection of Claims 1-3, 5-6, 12, and 15-18 Under 35 U.S.C. § 102(e)

Claims 1-3, 5-6, 12, and 15-18 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,128,509 to Veijola et al. (Veijola '509). This rejection is respectfully traversed.

Claim 1, upon which claims 2-4 depend, recites a mobile communication system that includes at least one mobile communication network, at least one service center for point-to-multipoint services, and at least one network node through which a point-to-multipoint service is transmitted to cells belonging to a destination area. As recited in claim 1, the geographical destination area of the point-to-multipoint service being indicated in the system is indicated as a logical name. The system includes memory means for mapping each predetermined logical name to one or more network element

addresses of the system. Also, the system includes a service center that is arranged to inquire, in response to a received service request, from the memory means the addresses of the network elements corresponding to the logical name of the destination area and to transmit the point-to-multipoint service via the network elements to the geographical destination area.

Claim 5, upon which claims 6-7 depend, recites a method for transmitting a point-to-multipoint service of a mobile communication system to a destination area of the service indicated as a logical name in a service request. The mobile communication system includes at least one mobile communication network, at least one service center for point-to-multipoint services, and at least one network node through which the point-to-multipoint service is transmitted to the cells located within the destination area. The method recited in claim 5 includes the steps of determining logical names for geographical destination areas of the service, maintaining an address list for each logical name in the mobile communication network, the address list being used for mapping a logical name to one or more network element addresses of the system, and receiving a service request at a first service center, the service request indicating the destination area as a logical name. The method recited in claim 5 also includes the steps of mapping the logical name by means of the address list to one or more network element addresses, and transmitting the service via the network elements to the geographical destination area.

Claim 8, upon which claims 9-11 depend, recites a method for transmitting a point-to-multipoint service of a mobile communication system to a destination area of the

service. As recited in claim 8, at least part of the destination area is outside the service area of a first service center and the first service center receives a service request from a service provider. The method recited in claim 8 includes the steps of setting up a connection from the first service center to a second service center, maintaining information about the address of the second service center and its service area at the first service center, and receiving the service request indicating the destination area at the first service center. The method recited in claim 8 also includes the steps of checking at the first service center whether at least part of the destination area is within the service area of the second service center and, if at least part of the destination area is within the service area of the second service center, forwarding the service request to the second service center.

Claim 12, upon which claims 13-15 depend, recites an area register which forms part of a mobile communication system that includes at least one network. As recited in claim 12, the network includes a service center for point-to-multipoint services for transmitting a point-to-multipoint service to a geographical destination area indicated in a service request. The destination area may be indicated as a logical name. As recited in claim 12, the area register includes a list of logical names for at least one service center and at least one network element address list of the system corresponding to each logical name in order to allow a logical name to be mapped to at least one system network element address. The area register also includes processing means for receiving inquiries concerning the logical names and for replying to the inquiries.

Claim 16, upon which claims 17-18 depend, recites a service center for transmitting point-to-multipoint services in a mobile communication system to a geographical destination area of the service. As recited in claim 16, the service center includes reception means for receiving a service request, the service request having a destination area that can be indicated as a logical name. The service center further includes inquiry means for mapping the logical name given in the service request to at least one network element address of the system, and transmission means for transmitting the service to the destination area via each network element.

Veijola '509, as shown in the title thereof, discloses an "intelligent service interface and messaging protocol for coupling a mobile station to peripheral devices". Veijola '509 also discloses, a "message passing router and connection functions for facilitating a seamless integration of a mobile station with one or more external devices through a . . . mobile station interface" (column 1, lines 59-62). In addition, Veijola '509 discloses, a "multipoint connection capability for a mobile station, and . . . a group of configuration functions that make the software protocol more flexible" (column 2, lines 2-4).

However, Veijola '509 fails to disclose or suggest at least the "service center for point-to-multipoint services", recited in claims 1, 5, 12, and 16 of the present application. Veijola '509 also fails to disclose or suggest at least the "network node through which a point-to-multipoint service is transmitted to cells belonging to a destination area", as recited in claims 1 and 5. Further, Veijola '509 fails to disclose or suggest at least the

geographical destination area of the point-to-multipoint service being indicated in the system as a logical name, as recited in claims 1, 5, 12, and 16. In addition, Veijola '509 fails to disclose or suggest at least the "memory means for mapping each predetermined logical name to one or more network element addresses of the system", recited in claim 1. Even further, Veijola '509 fails to disclose or suggest at least "a service center [being] arranged to inquire, in response to a received service request, from the memory means the addresses of the network elements corresponding to the logical name of the destination area and to transmit the point-to-multipoint service via the network elements to the geographical destination area", as recited in claim 1.

As recited on page 2, lines 2-5, of the specification of the present application, "[t]he function of a point-to-multipoint transmission is to allow a sender to transmit data to recipients in a destination area by using one and the same service request". According to certain embodiments of the claimed invention, point-to-multipoint service takes the form of a service that offers a subscriber an opportunity to send a message to multiple receivers with only one service request. As mentioned above, Veijola '509 fails to disclose or suggest at least such point-to-multipoint service.

Applicant respectfully submits that Veijola '509 discloses an interface in a mobile station, but relates only to the multipoint connection capability of the mobile station. As such, Veijola '509 fails to disclose or suggest at least areal point-to-multipoint services in a mobile communication system and/or mapping of logical names of geographical destination areas of a service to network element addresses, such as those of the claimed

invention.

On page 7, line 17-18, of the present application, a service center is defined as a network element that controls point-to-multipoint transmissions in a network. Applicant points out that the above-mentioned multipoint connection capability of the mobile station disclosed in Veijola '509 fails to disclose or suggest the "service center for point-to-multipoint services" recited in claims 1, 5, 12, and 16 of the present application.

Applicant also points out that Veijola '509 discloses only an interface between a mobile station and a peripheral device. Therefore, Veijola '509 fails to disclose or suggest either network nodes transmitting point-to-multipoint services or destination areas of point-to-multipoint services. Hence, as mentioned above, Veijola '509 fails to disclose or suggest at least the "network node through which a point-to-multipoint service is transmitted to cells belonging to a destination area", as recited in claims 1 and 5.

In addition, because Veijola '509 discloses only the interface between a mobile station and a peripheral device, Veijola '509 fails to disclose or suggest geographical destination areas or logical names of such areas. As such, as mentioned above, Veijola '509 fails to disclose or suggest at least the "geographical destination area of the point-to-multipoint service being indicated in the system as a logical name", as recited in claims 1, 5, 12 and 16 of the present application.

According to certain embodiments of the claimed invention, predetermined logical names indicate the geographical destination area of the point-to-multipoint service. Hence, the "logical names" recited in the claimed invention are not analogous to the

“logical address” of a function in the interface between the mobile station and a peripheral device, as disclosed in lines 28-33 and 55-62 of column 7 of Veijola ‘509. The distinction between the “logical names” of the claimed invention and the “logical address” of Veijola ‘509 is further apparent from lines 34-41 of column 7 thereof, wherein the functions of the interface between the mobile station and a peripheral device are discussed. Hence, at least in view of the above, the “memory means for mapping each predetermined logical name to one or more element addresses of the system”, recited in claim 1 of the present application is neither disclosed nor suggested by Veijola ‘509.

Veijola ‘509, in lines 52-55 of column 13 thereof, discloses an “Intelligent Software Architecture (ISA) [that] divides the mobile station’s fundamental capabilities into logical groups or resources”. Veijola ‘509 also discloses that “[i]n [the] ISA the mobile station’s resources are controlled by servers”. Veijola ‘509 further discloses, from column 13, line 65, to column 15, line 17, thereof, that functionality refers to the operations of the router and the connectivity layer in implementing a message passing mechanism within the mobile station. Even further, Veijola ‘509 discloses, in lines 50-59 of column 15 thereof, the properties of the server in partitioning the software of the mobile station. However, Applicant respectfully points out that the Veijola ‘509 fails to disclose or suggest at least transmitting point-to-multipoint service via network elements to geographical destination areas, as recited in the claimed invention. Hence, as mentioned above, Veijola ‘509 fails to disclose or suggest at least “a service center being

arranged to inquire, in response to a received service request, from the memory means the addresses of the network elements corresponding to the logical name of the destination area and to transmit the point-to-multipoint service via the network elements to the geographical destination area”, as recited in claim 1 of the present application.

At least in view of the above, Applicant respectfully submits that Veijola ‘509 fails to disclose or suggest the subject matter recited in claims 1, 5, 12, and 16 of the present application. At least for this reason, Applicant further submits that claims 1, 5, 12, and 16 are patentable over Veijola ‘509.

Claims 2-3, 6, 15 and 17-18 all depend, either directly or indirectly, upon at least one of claims 1, 5, 12, and 16, and thereby inherit all of the patentable distinctions thereof. Hence, Applicant respectfully submits that claims 2-3, 6, 15, and 17-18 are patentable over Veijola ‘509 at least for the reasons discussed with reference to claims 1, 5, 12, 15, and 16.

At least in view of the above amendments and remarks, reconsideration and withdrawal of the rejection of claims 1-3, 5-6, 12, and 15-18 under 35 U.S.C. § 102(e) over Veijola ‘509 is respectfully requested.

Rejection of Claims 8-11 under 35 U.S.C. § 102(e):

Claims 8-11 have been rejected under 35 U.S.C. § 102(e) as being anticipated over U.S. Patent No. 5,862,490 to Sasuta et al. (Sasuta ‘490). This rejection is respectfully traversed.

Sasuta '490 discloses "a method by which communication services are provided to a plurality of roaming communication units that each have one or more communication service requirements" (column 2, lines 35-38). Sasuta '490 also discloses that the communication system disclosed therein includes a "central service directory 201, which stores service provider information [and which] is linked to each service provider in the communication system" (column 3, lines 21-23). In addition, Sasuta '490 discloses that "[l]inks [to the central service directory] provide a centralized point for information regarding available services, active communications, and present affiliations" (column 3, lines 25-27).

However, Applicant respectfully submits that Sasuta '490 relates only to the service requirements defined by means of service attributes that have no connection to the service areas of service centers controlling point-to-multipoint transmission. In other words, Sasuta '490 fails to disclose or suggest at least the "destination areas" of the "point-to-multipoint services" recited in claim 8 of the present application. Further, Applicant respectfully submits that Sasuta '490 discloses or suggests none of the subject matter recited in claim 8 of the present application.

More specifically, Applicant points out that Sasuta '490 fails to disclose or suggest at least the "transmitting a point-to-multipoint service of a mobile communication system to a destination area of the service", as recited in claim 8. Further, not only does Sasuta '490 fail to disclose or suggest point-to-multipoint services, but Sasuta '490 also fails to disclose or suggest the concept of destination areas in point-to-multipoint services.

Sasuta '490, on lines 10-11 of column 3 thereof, does disclose service providers that may be sites of multiple site configuration. However, Applicant respectfully points out that the disclosure of such service providers fails to disclose or suggest the point-to-multipoint service of a mobile communication system recited in claim 8.

Sasuta '490 discloses a traditional group of service providers that provide communication services for communication units (see column 2, line 57, through column 3, line 16). Sasuta '490 also discloses an affiliation list that affiliates communication units and service types to service providers (see column 3, lines 45-54). Sasuta '490 further discloses conventional information exchange between a communication unit and a service provider (see column 6, lines 35-37). Even further, Sasuta '490 discloses how a combined affiliation list is used to forward a communication request to another service provider (column 6, lines 51-59).

However, none of the above-discussed subject matter disclosed in Sasuta '490 refers to point-to-multipoint services, service centers for controlling the point-to-multipoint services, service areas of such service centers, nor destination areas related to point-to-multipoint services.

In addition to the above Sasuta '490, on column 4, lines 43-53, thereof, discloses how the communication unit affiliates with a service provider that supports its service units service requirement. However, the checking of the service requirements disclosed in Sasuta '490 fails to disclose or suggest either the point-to-multipoint services or the

checking of the relation between the destination area and the service area of the second service center for point-to-multipoint services of the claimed invention.

At least in view of the above remarks, Applicant respectfully submits that Sasuta '490 fails to disclose or suggest the subject matter recited in claim 8 of the present application. As such, Applicant respectfully submits that claim 8 is patentable over Sasuta '490.

Claims 9-11 depend directly upon claim 8, and thereby inherit all of the patentable distinctions thereof. Hence, Applicant respectfully submits that claims 9-11 are patentable over Sasuta '490 at least for the reasons discussed above in connection with claim 8.

At least in view of the above remarks, reconsideration and withdrawal of the rejection of claims 8-11 under 35 U.S.C. §103(e) as being anticipated by Sasuta '490 is respectfully requested.

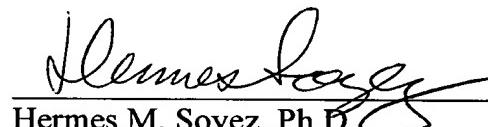
Applicant respectfully submits that all of the comments included in the Office Action have been addressed and that all of the rejections included in the Office Action have been overcome. Hence, Applicant respectfully further submit that, at least in view of the above, claims 1-18 of the present application contain allowable subject matter. Therefore, it is respectfully requested that all claims pending in the present application be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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